

## A New *Acanthinus* from Panama

(Coleoptera: Anthicidae)

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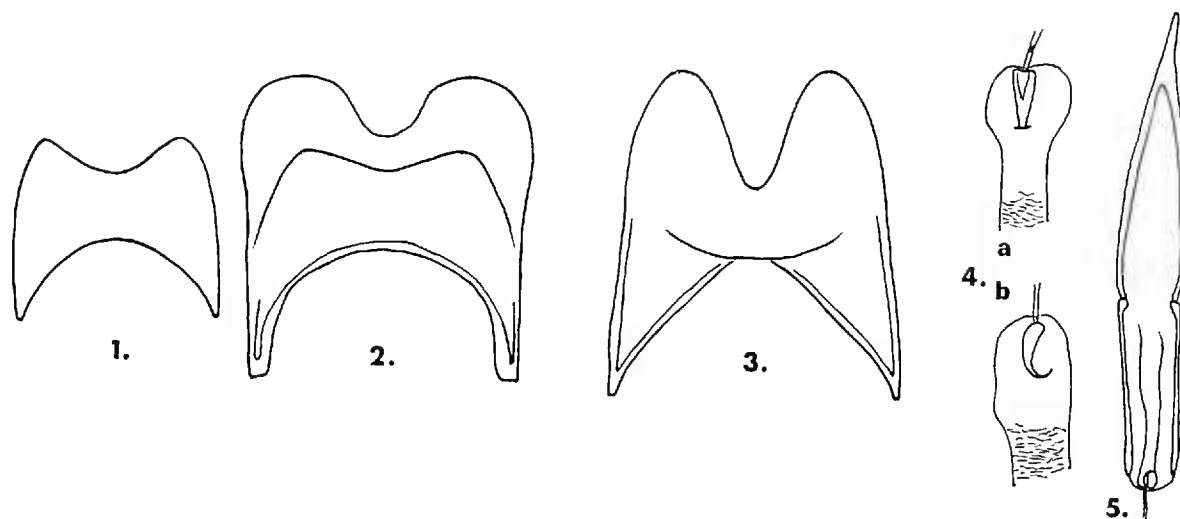
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In a recent series of ultraviolet light trap samples taken in the Canal Zone of Panama, there were present three species of *Acanthinus* which could be placed in the *aequinoctialis*-Group of Werner (1967). Two of the species were named, *aequinoctialis* (LaFerte) and *zeteki* Werner, while the third was undescribed. In several instances all three species were collected during the same night and so present a problem in species separation. The new species is more similar to *aequinoctialis* and *zeteki* than to any of the others in the group and actually combines certain of the characters which Werner used for the separation of these species in his key.

The shape of sternite 8 of the males is the best character for species separation. The emargination of this sternite in the new species is moderately deep and wide (Fig. 2). In *zeteki* the emargination is very deep and narrow (Fig. 3). Sternite 8 in *aequinoctialis* may be shallowly emarginate (Fig. 1). Werner notes in his key to the group that the sternite of *aequinoctialis* varies from truncate to gently convex. This description varies slightly from Figure 1, but examination of specimens from Brazil has convinced me that the Panama population is conspecific. The new species may be separated by rearrangement of Werner's key to the *aequinoctialis* group.

### KEY TO ACANTHINUS OF THE AEQUINOCTIALIS GROUP

1. Dorsal portion of elytra subopaque due to extremely fine granulation on the surface between the punctures ..... 2  
Dorsal portion of elytra smooth and shiny ..... 3
2. Base of head shallowly, almost evenly curved between the distinct temporal angles. Elytra usually with an obscure, often interrupted, dark band across the middle ..... *rugosus* (LaFerte)  
Base of head slightly produced at middle, the temporal angles feeble; therefore nearly evenly semicircular behind the eyes. Elytra not banded .....  
..... *tucumanensis* (Pic)
3. Male sternite 8 with deep notch at apex (Fig. 3); rugules on head apparently not oriented in a particular direction; antennae appearing heavy due to thickening of intermediate segments; usually with a dark midband ..... *zeteki* Werner  
Male sternite with notch shallower (Fig. 2) or gently concave to convex



FIGS. 1-5. Terminal sternites and genitalia of *Acanthinus*. Fig. 1. Sternite 8, *aequinotialis*. Fig. 2. Sternite 8, *umbilicatus*. Fig. 3. Sternite 8, *zeteki*. Fig. 4. Internal sac, showing gonopore armature; a, ventral view; b, lateral view. Fig. 5. Aedeagus.

- (Fig. 1); rugules on head appearing to be at least slightly oriented longitudinally; elytra without midband ..... 4
4. Male sternite 8 with a distinct notch; head often with longitudinal area at center of head without rugules and with sparse umbilicate punctures, punctures may be obscured by definite longitudinal rugules; antennae appearing heavy due to thickening of intermediate segments ... *umbilicatus* n. sp. Male sternite 8 gently concave to convex; head always with distinct rugules at center, no umbilicate punctures visible; antennae without thickening of intermediate segments ..... *aequinotialis* (LaFerte)
- The format of Werner is used in presenting the species description.

### *Acanthinus umbilicatus*, New Species

1.98-2.43 mm., rufescent with paler elytra, varying to dark brown with elytra brownish, coloration of elytra uniform. Similar in general appearance to *aequinotialis*, but with "heavy" antennae, strigules distinctly longitudinally oriented and frequently with a longitudinal smooth central area on the head.

Holotype male: length 2.43 mm. Head 0.50 mm. long, 0.52 wide across eyes, 0.40 behind, tempora flat and nearly parallel, 0.07 long, temporal angles quite sharp and at ca. 120°, base evenly curved between them. Surface shiny, punctures small, umbilicate, smoothly strigose longitudinally, strigulations not dense, longitudinal smooth area at center. Setae inconspicuous, tactile setae erect and fairly stout, 0.08 mm. Eyes prominent, 0.25 × 0.18 mm., separated by 0.31, a line across their hind margins 0.15 from base. Last segment of maxillary palpi securiform, 0.17 × 0.09 mm. Antennae fairly stout, gradually thicker toward apex, with tactile setae 0.04 mm. long. Measurements in 0.01 mm.: 10/7, 7/5, 9/5, 7/5, 8/5, 7/5, 6/5, 7/7, 8/7, 9/8, 12/7. Segment 1 eccentrically pedunculate, 2-10 thickest near apex, 7-10 subtruncate at base, truncate at apex, 11 subtruncate at base, convexly tapered to a blunt point near base. Pronotum 0.50 mm. long, 0.34 wide at base, 0.31 at constriction, 0.43 maximum (0.46 including tubercles), 0.21 at collar,

tubercles short, bluntly pointed. Disc slightly convex, shiny, covered with large, flat-bottomed punctures, sharply defined by a rugule between them, rugules with slight longitudinal orientation, no microreticulation in disc. Elytra 1.42 mm. long, 0.65 wide at the distinct humeri, 0.75 maximum, with a feeble, postbasal transverse depression. Punctures sharply defined, moderately deep in basal half, gradually smaller but distinct behind, 0.04 mm. from center to center. Setae appressed, 0.20 mm., barely clearing punctures; tactile setae erect, 0.07 mm., moderately stout. Mesosternum strigulose, longitudinal medially to oblique laterally, the strigules not anastomosing; 0.10 wide laterally, leaving 0.07 of mesepisterna exposed laterally. Fringe setae appressed, 0.07 mm. long anteriorly. Mesepisterna with deep punctures at anterior margin, smooth and shiny behind, fringe setae denser posterolaterally. Metasternum with longitudinal strigules, smoother medianly; metepisternum smooth next to sternum, longitudinally strigulate laterally. Abdominal sternum 1 with few longitudinal strigules, microreticulate, the rest with only microreticulation, setae appressed, sparse, 0.04 mm. Sternum 7 essentially as in *aequinocialis*. Sternum 8 not down-curved, concave across base, with moderately deep U-shaped median notch, 0.28 mm. wide, 0.18 from one tip to the other, notch ca. 0.07 mm. deep. Ventral surface microreticulate, edges of notch with some long setae. Apex of tergum 8 with punctulate and pubescent zone, 0.26 mm. wide, 0.12 long, set off anteriorly by a sharp, transverse ridge. Front femur  $0.48 \times 0.15$  mm., front tibia  $0.37 \times 0.07$ , hind femur  $0.52 \times 0.17$ . Aedeagus with tegmen gradually tapered (Fig. 5); gonopore armature essentially as in other species, with spines in the internal sac near the gonopore armature (Fig. 4).

FEMALE.—Similar to male, but with sternite 8 unmodified.

*Holotype male*: ALBROOK FOREST SITE, FORT CLAYTON, CANAL ZONE, PANAMA, 23/24 May 1968, black light trap, R. Hutton, Lot No. 200. 45 paratypes: 18 males, 25 females, same locality as holotype, 25 May, 1967 to 10 May, 1968, Hutton and Llaurodo. Individuals were collected every month except July and October. 52 same locality; 2 males, 5 females, 25/26 May 1967, Hutton & Llaurodo. 1 male, 1/2 June 1967, Hutton & Llaurodo. 1 female, 3/4 August 1967, Hutton & Llaurodo. 2 females, 7/8 September 1967, Hutton & Llaurodo. 1 female, 28/29 September 1967, Hutton & Llaurodo. 1 male, 2 females, 30 November/1 December 1967, Hutton & Llaurodo. 1 female, 28/29 December 1967. 1 female, 19/20 January, Hutton & Llaurodo. 2 males, 30/31 January 1968, R. Hutton. 1 male, 3 females, 23/24 February, R. Hutton. 1 female, 7/8 March 1968, R. Hutton. 2 males, 3 females, 21/22 March 1968, R. Hutton. 2 males, 1 female, 28/29 March 1968, R. Hutton. 3 males, 1 female, 4/5 April 1968, R. Hutton. 2 males, 10/11 April 1968, R. Hutton. 1 male, 2 females, 18/19 April 1968, R. Hutton. 1 male, 1 female, 9/10 May 1968, R. Hutton. 2 males, Las Cumbres, Canal Zone, 10 January/1 April 1974, H. Wolda. The holotype will be placed at the University of Arkansas with half the paratypes. Two paratypes will be placed at the United States National Museum and the remainder in the author's collection.

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#### LITERATURE CITED

- WERNER, F. G. 1967. A revision of *Acanthinus* (Coleoptera: Anthicidae). IV. Ann. Amer. Entomol. Soc., 60: 255-273.